

VIRGIN RIVER BASIN

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09404900 EAST FORK VIRGIN RIVER NEAR SPRINGDALE, UT

LOCATION.--Lat 37°09'51", long 112°57'28", in SE^{1/4}SW^{1/4}NW^{1/4} sec. 2, T. 42 S., R. 10 W., Washington County, Hydrologic Unit 15010008, Zion National Park, on right bank 0.7 mi upstream from Zion National Park boundary, 1.2 mi upstream from Shunes Creek, 2.7 mi southeast of Springdale, and 3.4 mi south-southeast of Zion National Park headquarters.

DRAINAGE AREA.--343 mi².

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,940 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,100 ft³/s, Aug 10, 1997, gage height, 11.38 ft from floodmark and rating curve extended above 200 ft³/s on basis of slope-area measurements at gage heights, 6.41 ft and 9.70 ft; minimum daily discharge, 26 ft³/s, Sep 14, 15, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Jun 28	1515	*432	*6.23					

Minimum daily discharge, 34 ft³/s, Jul 22, 24, 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	44	49	53	51	63	56	44	40	40	36	41
2	41	43	49	57	51	67	65	44	40	40	38	41
3	44	43	50	59	55	64	69	44	40	39	38	42
4	e38	43	50	50	54	65	65	43	40	40	37	42
5	e37	43	50	49	53	64	65	43	40	39	43	42
6	e37	43	49	48	50	63	55	43	40	39	41	42
7	e36	44	51	56	53	65	55	43	40	39	45	42
8	e35	44	56	53	53	69	56	43	40	38	38	42
9	e35	44	50	54	51	72	57	43	40	38	36	44
10	e36	46	50	54	52	72	54	43	40	38	37	49
11	e37	47	50	53	53	75	54	43	40	37	37	44
12	e36	51	51	53	51	71	53	43	39	37	37	43
13	e35	71	50	54	51	73	49	42	39	37	38	43
14	e35	50	51	54	54	72	49	43	39	37	38	42
15	e36	48	51	54	53	72	49	43	40	37	38	42
16	e35	48	48	53	53	70	48	43	40	42	38	42
17	e35	47	49	53	52	69	48	43	40	37	39	42
18	e36	47	51	53	55	69	50	42	40	36	42	42
19	e37	46	51	53	55	70	53	42	40	36	40	56
20	e36	47	51	53	54	69	50	42	40	35	68	51
21	e36	47	51	53	57	67	50	42	40	35	50	48
22	e38	47	50	52	66	67	48	41	40	34	42	44
23	e38	47	50	52	81	67	48	41	40	35	40	46
24	e37	47	51	52	73	67	47	41	40	34	39	44
25	37	49	58	55	66	62	46	41	40	35	40	42
26	37	49	119	50	106	59	46	41	41	34	40	41
27	37	49	57	50	99	60	45	41	41	35	41	41
28	37	49	49	54	75	58	43	41	56	35	41	43
29	38	49	51	53	65	58	44	41	42	35	41	52
30	38	50	56	53	---	58	44	40	40	35	41	52
31	41	---	53	55	---	58	---	40	---	36	41	---
TOTAL	1,146	1,422	1,652	1,645	1,742	2,055	1,561	1,309	1,217	1,144	1,260	1,327
MEAN	37.0	47.4	53.3	53.1	60.1	66.3	52.0	42.2	40.6	36.9	40.6	44.2
MAX	44	71	119	59	106	75	69	44	56	42	68	56
MIN	35	43	48	48	50	58	43	40	39	34	36	41
AC-FT	2,270	2,820	3,280	3,260	3,460	4,080	3,100	2,600	2,410	2,270	2,500	2,630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	46.7	53.6	55.0	62.0	66.6	74.8	67.7	50.8	41.7	39.1	42.1	45.7
MAX	62.3	62.8	62.9	110	110	153	200	109	57.7	44.4	52.0	74.6
(WY)	(1998)	(1994)	(1997)	(1993)	(1993)	(1993)	(1993)	(1993)	(1993)	(1998)	(2001)	(1997)
MIN	37.0	47.0	44.7	43.3	53.8	45.6	36.8	35.4	34.4	31.7	36.3	29.6
(WY)	(2004)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(1996)	(2002)	(2002)	(2002)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1992 - 2004
ANNUAL TOTAL	16,172	17,480	
ANNUAL MEAN	44.3	47.8	
HIGHEST ANNUAL MEAN			53.7
LOWEST ANNUAL MEAN			41.6
HIGHEST DAILY MEAN	180	Feb 12	85.1
LOWEST DAILY MEAN	30	Aug 30	26
ANNUAL SEVEN-DAY MINIMUM	31	Aug 26	27
ANNUAL RUNOFF (AC-FT)	32,080	34,670	38,930
10 PERCENT EXCEEDS	52	64	70
50 PERCENT EXCEEDS	43	44	49
90 PERCENT EXCEEDS	33	37	36

e Estimated

